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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,052	01/05/2001	Jun Liu	MS1-711US	4697

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EXAMINER	
LIANG, GWEN	
ART UNIT	**PAPER NUMBER**
2162	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/756,052	LIU ET AL.	
	Examiner	Art Unit	
	GWEN LIANG	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,8,9,11,12,15,21,23,25-30 and 32-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 4, 5, 8, 9, 11, 12, 15, 21, 23, 25-30, 32-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications through the applicant's amendment, and Request for Continued Examination (RCE), filed on 11/15/2005.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 2, 4, 5, 8, 9, 11, 12, 15, 21, 23, 25-30, 32-34 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The implementation steps of deriving a unique identifier from a portion of a processed image, wherein the portion being less than a whole of the processed image which are critical to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Regarding independent claims 1, 8, 15, 21, 29, without sufficient disclosure of the steps essential in implementing the applicant's claimed subject matter of "deriving a unique identifier for the one processed image, the unique identifier being derived from a portion of the one processed image, the portion being less than a whole of the one processed image", a person of ordinary skill in the art will not know how to generate a unique image identifier based only on a portion of that image, because two different images may consist certain portions of contents that are the same but different in the other portions, and may get exactly the same identifiers if the identifiers of these two

different images are derived from the same portions of these two images, hence not unique.

Furthermore, without sufficient disclosure of the steps essential in implementing the applicant's claimed subject matter of "the unique identifier being derived such that if a different image of the processed images shares the unique identifier, the unique identifier indicates that all content inside the different image is identical to all content inside the one processed image", a person of ordinary skill in the art will not know how to generate an image identifier based only on a portion of that image and guarantee that the content of that image will be the same as the content of another image that shares the same image identifier generated using the same method, because the contents between these two images can be same on the portions used to generate the image identifiers, but different on the portions which are not used to generate the image identifiers. The specification discloses in page 14 that the unique identifier can be derived from a portion of the compressed image without any further explanation. Without sufficient support of essential steps in the specification, a person of ordinary skill in the art will not know how to make and use the invention as claimed in the applicant's invention.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 2, 4, 5, 8, 9, 11, 12, 15, 21, 23, 25-30, 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding independent claims 1, 8, 15, 21, 29, the claimed subject matter "the unique identifier being derived such that if a different image of the processed images shares the unique identifier, the unique identifier indicates that all content inside the different image is identical to all content inside the one processed image" renders the claim indefinite. If a different image shares the unique identifier, the unique identifier then is not unique. The examiner assumes that a "different" image is different from the image being compared with. If two images are identified by same filenames (i.e. identifiers) and containing same contents, they are by no means two "different" images. The claim language is confusing and needs further clarification.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 2, 4, 5, 8, 9, 11, 12, 15, 21, 23, 25-30, 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stuart ("Netware Mobile extends network to off-line users"), further in view of Spanbauer ("Happy 2000-or 1900!. Qwerty versus Dvorak. Stop a hard disk from churning"), further in view of Suzuki et al, "Suzuki", (EP

Patent No. 1,150,207), further in view of Hollingsworth et al, "Hollingsworth - Binary", ("Binary Version Management for Computational Grids"), and further in view of Gramlich et al., "Gramlich", (U.S. Patent No. 5,202,982).

With respect to claim 1, Stuart discloses a method ...comprising:

assigning each of a plurality of data files to one of a plurality of specific corresponding downloadable file groups (See for example: col. 3 – col. 4, wherein administrators can create file groups consisting of commonly shared files which users can download in one shot); and

selectively sending parts of files that have changed from the source device to the client device (See col.1 – col. 2, wherein users have the option of only updating parts of files that have changed).

However Stuart does not explicitly teach a method comprising generating processed images and a listing of unique identifiers by compressing together data files assigned to the downloadable file group..., and deriving a unique identifier, storing the processed images and the listing ..., comparing the listing of unique identifiers ... and selectively sending processed images ...

Spanbauer teaches a method that for each downloadable file group:

compressing together data files assigned to the downloadable file group to form one processed image of the processed images (See for example: page 2 paragraph 12 – page 3 paragraph 1, wherein as collection of files are compressed into one or more archive files, it is obvious that these archive files are processed images each contain files compressed into a group corresponding to an archive file);

deriving a unique identifier of the unique identifiers for the one processed image (See for example: page 2 paragraph 12 – page 3 paragraph 1, wherein it is obvious that each archive filename is a derived unique identifier of the processed image which consists of many compressed files whose filenames are also unique identifiers).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to compress data files to form one processed image as disclosed by Spanbauer for the files assigned to a group as taught in Stuart to speed and simplify downloading (See for example: page 3 paragraph 1). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

However the combination of Stuart and Spanbauer does not explicitly teach a method comprising deriving a unique identifier from a portion of the one processed image, the portion being less than a whole of the one processed image, the unique identifier being derived such that if a different image of the processed images shares the unique identifier, the unique identifier indicates that all content inside the different image is identical to all content inside the one processed image generating a listing of unique identifiers, storing the processed images and the listing of unique identifiers ..., comparing the listing of unique identifiers ... and selectively sending processed images ...

Suzuki teaches a method comprising:

generating a listing of unique identifiers; and storing the processed images and the listing of unique identifiers to a source device (See for example: col. 1 lines 48-57,

wherein the files stored on the server side and will eventually be stored in to the client are equivalent to the processed images and the update list containing version specific information illustrate a listing of unique identifiers being generated);

comparing the listing of unique identifiers with a current listing of unique identifiers in a client device (See for example: col. 2 lines 10-34, wherein the file specifying part specifies the files to obtain in the latest condition by comparing the local update list with the update list sent from the server site); and

selectively sending processed images from the source device whose unique identifiers appear in the listing of unique identifiers but not in the current listing of unique identifiers in the client device (See for example: col. 2 lines 10-34, wherein the file specifying part selects the files to obtain in the latest condition by comparing the local update list with the update list sent from the server site and by requesting the selected files from the server, the server transfers the selected files to the client).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the steps of generating ..., storing ..., comparing ... and selectively sending ...as disclosed by Suzuki into the file downloading and updating method as disclosed in the combination of Stuart and Spanbauer in order to provide a client-server system in which software is automatically updated (See for example: col. 1 lines 40-42). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

However the combination of Stuart, Spanbauer, and Suzuki does not explicitly teach a method comprising deriving a unique identifier from a portion of the one

processed image, the portion being less than a whole of the one processed image, the unique identifier being derived such that if a different image of the processed images shares the unique identifier, the unique identifier indicates that all content inside the different image is identical to all content inside the one processed image.

"Hollingsworth - Binary" teaches a method comprising deriving a unique identifier from the content of the one processed image (See for example: pages 3-4 section "3. Content Naming Explained", particularly page 4 lines 2-6, "A CDN provides all of its benefits by converting a package name from a name and version number meaningful to a developer into a Content-Derived Name that can be used to check library integrity and support secure remote retrieval. Since this name is probabilistically guaranteed not to conflict with other library names, it may be shared between different computers without fear of name duplication", since the Content-Derived Name is derived from the content of the package, which is equivalent to a processed image, it is obvious that it is derived from a portion of the package).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the content-derived name as disclosed by "Hollingsworth - Binary" as a unique identifier for the processed image as disclosed in the combination of Stuart, Spanbauer, and Suzuki. By assigning Content-Derived Names, it is guaranteed that each version of each package has a unique name (page 4 section 4.1, lines 5-6) and one of the best features of the CDN systems is that it permits automatic downloading of missing software components (page 5 section 4.2 lines 1-2). One of

ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

However the combination of Stuart, Spanbauer, Suzuki and "Hollingsworth - Binary" does not explicitly teach that the unique identifier is derived from a portion of the one processed image, the portion being less than a whole of the one processed image, the unique identifier being derived such that if a different image of the processed images shares the unique identifier, the unique identifier indicates that all content inside the different image is identical to all content inside the one processed image. Gramlich teaches that the unique identifier is derived from a portion of the one processed image, the portion being less than a whole of the one processed image (col. 7, lines 47-49, "The hash value may be generated by any one of many ways which derive the hash values from the contents of the database component file"; col. 7, lines 53-61, "Preferably, the hash value is a sum of various key pieces of information to be contained in the database component file. For example, if the information to be contained in the database component file is the information shown in FIG. 3c, the hash value would be generated as follows: a separate hash value is computed for each of the sections in the file and the hash value incorporated into the file name is the sum of the hash values for each of the sections in the file"), the unique identifier being derived such that if a different image of the processed images shares the unique identifier, the unique identifier indicates that all content inside the different image is identical to all content inside the one processed image (col. 2, line 52 – col. 3, line 3, "Preferably the name of the file is generated by computing a hash value from the sum of the contents of the file

and concatenating the hash value to the name of the file. ... In addition, through the selection of heuristic methods for computing the hash value, a high degree of confidence can be maintained that the file names are unique. Furthermore, because the database component file names are unique for each source file, the process of searching for the correct file is simplified ... because the file name is unique for a particular file contents and a query or search program can safely assume that any file with the same name was generated from the same source file").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to derive a unique identifier for the processed image as disclosed in the combination of Stuart, Spanbauer, Suzuki, and "Hollingsworth - Binary", from a portion of the one processed image as disclosed in Gramlich, in order to provide a means for checking the integrity of the database with the current version of the source file (col. 2, lines 29-31). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claim 2 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Suzuki teaches a method wherein the source device includes at least one server device (See for example: title).

Claim 4 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Stuart teaches a method wherein assigning data files to downloadable file groups further includes assigning a plurality of related function data files to one downloadable file groups (See for example: col. 3 – col. 4).

Claim 5 is rejected on grounds corresponding to the reasons given above for claim 1 and furthermore Suzuki discloses a method comprising sending the processed image and the listing of unique identifiers to a client device that stores the processed image and the listing of unique identifiers in a persistent memory (See for example: col. 1 lines 48-57).

Claim 25 is rejected on grounds corresponding to the reasons given above for claim 1 and furthermore Spanbauer discloses a method wherein the one processed image for the downloadable file group has a ".cim" extension (See for example: page 2 paragraph 12 – page 3 paragraph 1, wherein it is obvious that each archive file is identified by a unique file name and a file extension selected for use is just a design choice and therefore does not have any patentable weight).

Claims 8, 9, 11, 12 and 26 are rejected on grounds corresponding to the reasons given above for claims 1, 2, 4, 5 and 25.

Claims 15 and 27are rejected on grounds corresponding to the reasons given above for claims 1 and 25.

Claim 21 is rejected on grounds corresponding to the reasons given above for claim 1, and furthermore Stuart teaches a network (See Title).

Claim 34 is rejected on grounds corresponding to the reasons given above for claim 21 and furthermore Spanbauer discloses a system wherein the client device is

further configured to access at least a subset of content associated at with downloaded processed images through a compressed file system driver, the compressed file system driver being configured to open and decompress content of the downloaded processed images using a compression scheme implemented by the server device to compress together the data files (page 1, paragraph 12 – page 2, paragraph 1).

Claims 23 and 28 are rejected on grounds corresponding to the reasons given above for claims 4 and 25.

Claims 29, 30, 32, 33 are rejected on grounds corresponding to the reasons given above for claims 1, 2, 4, 5.

Response to Arguments

8. Applicant's arguments with respect to all the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GWEN LIANG whose telephone number is 571-272-4038. The examiner can normally be reached on 12:00 P.M. - 8:30 P.M. Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12 January 2006
G.L.

Primary Examiner
Art Unit 2167